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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,706	10/15/2004	Norimasa Furukawa	259934US6PCT	2833

22850 7590 08/23/2006

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EXAMINER

REHM, ADAM C

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/511,706	FURUKAWA, NORIMASA	
	Examiner	Art Unit	
	Adam C. Rehm	2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/21/05; 10/15/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the units of different shapes per Claim 7 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 2 is objected to because of the following informality: typographic error in Line 3: "overlapped one another" is incorrect.
3. Claim 3 is objected to because of the following informality: typographical error or antecedent error in Line 4: "directs said light incident through" is incorrect.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by AN ET AL. (US 5,851,411), which discloses:

- A backlight characterized by being formed by combining a plurality of backlight units (15, Fig. 8) with respect to a lighting surface for illuminating a back of a video display unit formed by a single panel (17);
- Wherein said backlight units do not overlap (Fig. 8);
- A light reflecting unit which reflects light emitted from the light source into a predetermined direction (Fig. 9 illustrates an edge light unit requiring light redirection/reflection);
- A light guide plate that directs light through said unit (103, Fig. 9/15, Fig. 8);

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- Wherein said backlight units can be arranged in alternating or same directions (Fig. 7 illustrates units 15 with sides capable of fitting together in various arrangements); and
- Wherein said backlight units fit together without gaps (Fig. 8).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over AN ET AL. (US 5,851,411), which substantially discloses the claimed invention, but does not disclose backlight units of different shapes. However, more than a mere change of shape is necessary for patentability with such a change in form of an element of a prior patent resulting in more than natural phenomenon that man has accumulated through common knowledge. *Span-Deck v. Fab-Con*, 215 USPQ 835. Moreover, Applicant has not disclosed that backlights of different shapes solves any stated problems or is any particular purpose and it appears that the invention would perform equally well with the backlights of SOSHIKI.
6. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over AN ET AL. (US 5,851,411) and KUREMATSU ET AL. (US 5,816,677). AN substantially discloses the claimed invention as previously provided including backlights that are individually driven (Column 2, Lines 12-15), but does not specifically disclose a separate

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drive unit and a separate drive control unit. However, KUREMATSU teaches a drive control unit for the purpose of driving separate backlight drivers for the purpose of individual backlight control and preventing shadowing (Column 18, Lines 25-47) connected in a daisy chain (Fig. 20). It would have been obvious to one of ordinary skill in the art at the time of invention to modify AN and use the various drivers and a logical connection as taught by KUREMATSU in order to individually control the backlights.

7. Claims 10 and 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over AN ET AL. (US 5,851,411), KUREMATSU ET AL. (US 5,816,677) and NISHIZAWA (US 4,380,791). AN and KUREMATSU substantially disclose the claimed invention as previously provided, but do not specifically disclose a light quantity detector and a temperature detector. However, NISHIZAWA teaches a light quantity detector for the purpose of optimizing light emitted by varying a duty ratio/power supply control circuit that variable controls voltage/current based on offset data (Column 3, Line 67-Column 4, Line 38). It would have been obvious to one of ordinary skill in the art at the time of invention to modify AN and use the various detectors as taught by NISHIZAWA in order to optimize light output.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over AN ET AL. (US 5,851,411) KUREMATSU ET AL. (US 5,816,677) and NISHIZAWA (US 4,380,791), which substantially disclose the claimed invention, but does not disclose a plurality of light quantity detectors. However, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis*

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Paper Co. v. Bemis Co., 193 USPQ 8. Motivation for such includes increased control and adaptability.

9. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over AN ET AL. (US 5,851,411) and ITO ET AL. (US 6,464,367). AN substantially discloses the claimed invention as previously provided, but does not disclose a diffusion board and a transparent plate. However, ITO teaches the use of a transparent plate and a diffusion plate to provide uniform illumination (Paragraphs 117-119).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. MATSUI (US 2005-0073845)
11. GREDA ET AL. (US 6,948,840)
12. CHO (US 6,927,812)
13. CHO (US 6,580,477)
14. HIGUCHI ET AL. (US 6,241,358)

Correspondence


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam C. Rehm whose telephone number is 571.272.8589. The examiner can normally be reached on M-F 9-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571.272.2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ACR
9/16/2006


Thomas M. Sander
Primary Examiner